Amendments to the Drawings:

Figure 1 has been amended by adding the legend --Prior Art--.

Attachment: Replacement Sheet

Annotated Sheet Showing Changes

REMARKS/ARGUMENTS

The drawings were objected to. Figure 1 has been amended by adding the legend --Prior Art-- and is submitted herewith.

Claims 3-7, 10, 12-16, 21 and 23 were objected to because of informalities.

The claims were amended to correct for the informalities.

Claims 1, 8-10 and 17-19 stand rejected under 35 U.S.C. 102(b) as being anticipated by Shimase.

Claim 1 of the instant invention comprises the limitations of a focused ion beam (FIB) apparatus for directing a focused ion beam at an integrated circuit sample, wherein a charge pulse is generated each time an ion from the beam strikes the sample; a plurality of charge pulse detection electronics (CPDE) components, wherein the CPDE components are coupled to the sample; and a histogram display. In the method described in the Shimase patent, secondary ions 8 out of secondary particles which have been generated by the incident ion beam are detected by an MCP (Micro Channel Plate) 7 as a secondary particle detector. The secondary ion signal which has been amplified by the MCP 7 is detected by a detecting electrode 6, and then further amplified by a head amplifier 12 which is installed in the vicinity of the system body. As example of this signal is shown in Fig. 4A. The creation of secondary particles is a statistical process and results in the smooth slowly varying signal shown in Fig. 4A. The signal of the instant invention is a charge pulse produced in the sample when an ion is incident on the sample. The charge pulse produced in the instant invention is a rapidly varying signal produced when the ion beam impinges the sample. The pulse signal of the instant invention is therefore completely different from the smooth slowly varying signal described in the Shimase reference. The electronic apparatus described in the Shimase patent is configured to detect the secondary ion signals produced in the

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configuration described there and cannot detect the charge pulse signals produced in the instant invention. The charge pulse detection electronics (CPDE) of the instant invention is completely different from the electronics described in the Shimase reference for use in detecting the type of signals shown in Fig. 4A.

In forming the rejection of claims 1, 8-10 and 17-19, the examiner equates 7, 12, 30, 60, and 80 as being equivalent to the CPDE of the instant invention. These sections in the Shimase patent form part of the electronic system used to produce the signal shown in Fig. 4A. The above described sections are therefore not CPDE electronics as described by the examiner, but instant are electronic components used to measure the smooth slowly varying signals shown in Fig. 4A. Claims 1, 8-10 and 17-19 are therefore allowable over the cited art.

Applicants appreciate the indication that claims 2-7, 11-16 and 20-23, if rewritten in independent form including all of the limitations of the base claim and any intervening claims, would be allowable.
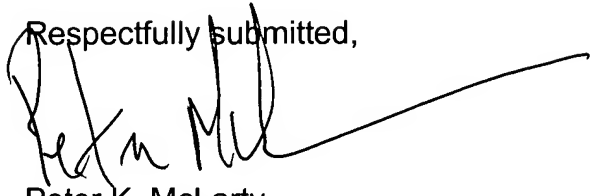
In light of the above, it is respectfully submitted that the present application is in condition for allowance, and notice to that effect is respectfully requested.

While it is believed that the instant response places the application in condition for allowance, should the Examiner have any further comments or suggestions, it is respectfully requested that the Examiner contact the undersigned in order to expeditiously resolve any outstanding issues.

To the extent necessary, Applicants petition for an Extension of Time under 37 CFR 1.136. Please charge any fees in connection with the filing of this paper, including

extension of time fees, to the deposit account of Texas Instruments Incorporated, Account No. 20-0668.

Respectfully submitted,

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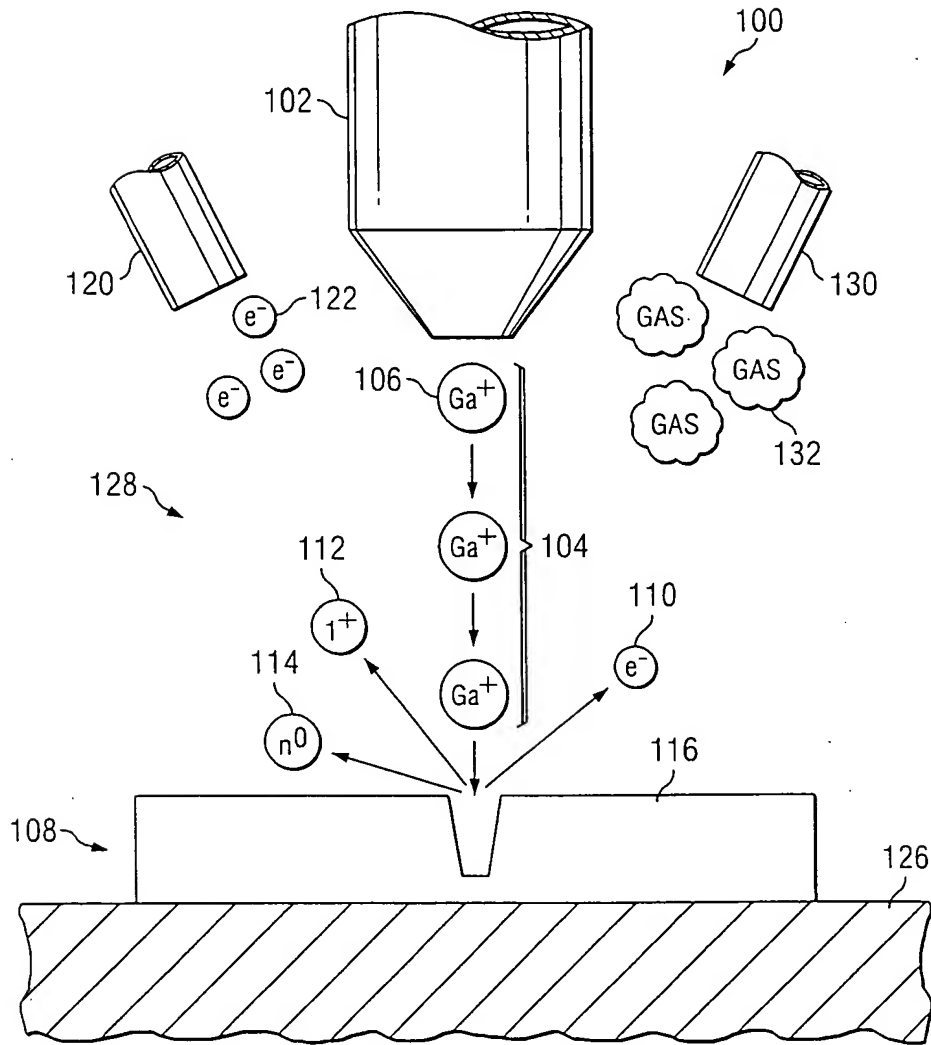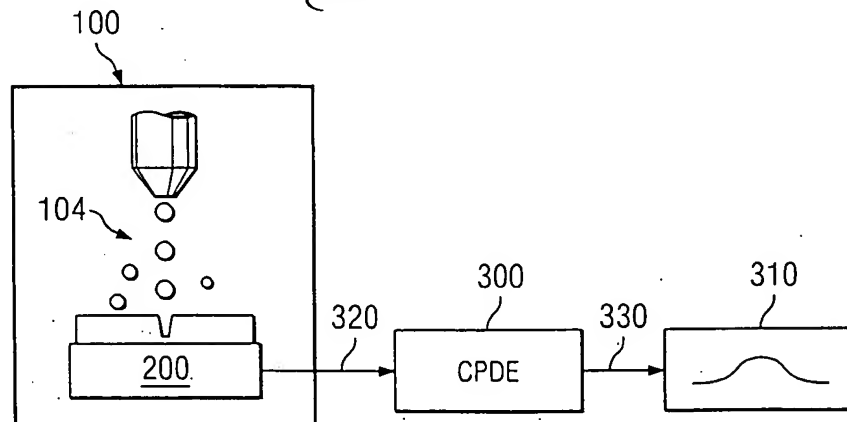*FIG. 1*

(PRIOR ART)

FIG. 3